

(19) RÉPUBLIQUE FRANÇAISE  
INSTITUT NATIONAL  
DE LA PROPRIÉTÉ INDUSTRIELLE  
PARIS

(11) N° de publication :  
(à utiliser que pour les  
commandes de reproduction)

2 676 892

(21) N° d'enregistrement national :

91 06983

(51) Int Cl<sup>3</sup> : A 24 F 47/00, 16/14

(12)

## DEMANDE DE BREVET D'INVENTION

A1

(22) Date de dépôt : 03.06.91.

(30) Priorité :

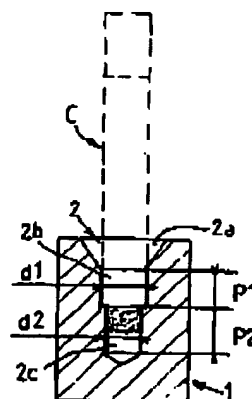
(43) Date de la mise à disposition du public de la  
demande : 04.12.92 Bulletin 92/49.(56) Liste des documents cités dans le rapport de  
recherche : *Le rapport de recherche n'a pas été  
établi à la date de publication de la demande.*(60) Références à d'autres documents nationaux  
apparentés :(71) Demandeur(s) : BELIN Laurent — FR et BALAY  
Frédérique née PAMARD — FR.(72) Inventeur(s) : BELIN Laurent et BALAY Frédérique  
née PAMARD.

(73) Titulaire(s) :

(74) Mandataire : Cabinet Laurent &amp; Charras.

(54) Dispositif d'extinction rapide de cigarettes.

(57) Le dispositif selon l'invention est constitué d'un corps  
(1) en matériau de bonne conduction thermique agencé  
avec un orifice borgne (2) recevant et bloquant l'extrémité  
incandescente d'une cigarette (C) suivant une profondeur  
inférieure à celle de l'orifice, l'extinction rapide s'opérant  
par absorption de la chaleur à travers le matériau du corps.



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BNS00010: &lt;FR 2 676 892 A1 &gt;

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DISPOSITIF D'EXTINCTION RAPIDE DE CIGARETTES.

L'objet de l'invention se rattache au secteur technique des articles pour fumeurs.

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Les campagnes anti-tabac et les nouvelles mesures restrictives à l'égard des fumeurs amènent à trouver des moyens rapides pour éteindre les cigarettes, afin de limiter la pollution ou de pouvoir rallumer ultérieurement la cigarette.

Pour cela, on a pensé à équiper les cendriers de dispositifs éteignoirs, mais on ne trouve pas de tels cendriers dans tous les lieux publics ou privés. D'autre part, ces dispositifs ne suppriment pas toujours les odeurs et les fumées et ne sont pas aisément transportables.

C'est pourquoi on a conçu le dispositif selon l'invention qui assure d'une manière simple, rapide, économique et propre, l'extinction d'une cigarette sans la détériorer et sans laisser des cendres écrasées dans le dispositif en supprimant ainsi les odeurs de tabac froid et en évitant des nettoyages fastidieux.

25

Suivant une première caractéristique, le dispositif d'extinction est constitué par un corps en matériau de bonne conduction thermique agencé avec un orifice borgne, recevant et bloquant l'extrémité incandescente d'une cigarette suivant une profondeur inférieure à celle de l'orifice, l'extinction rapide s'opérant par absorption de la chaleur à travers le matériau du corps.

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Selon une autre caractéristique, l'orifice de réception de l'extrémité incandescente de la cigarette présente successivement à partir de son entrée, un large chanfrein de guidage, un alésage de diamètre sensiblement  
5 égal à celui d'une cigarette et un alésage de diamètre inférieur à celui de la cigarette, afin d'assurer son arrêt en butée sans écrasement de la cendre.

Ces caractéristiques et d'autres encore ressortiront  
10 de la description qui suit.

Pour fixer l'objet de l'invention sans toutefois le limiter dans le dessin annexé :

- la figure 1 est une vue en perspective d'un  
15 exemple de réalisation du dispositif selon l'invention ;
- la figure 2 est une vue en coupe du dispositif selon l'invention ;
- la figure 3 est une vue à caractère schématique illustrant en coupe le dispositif selon l'invention as-  
20 socié à un étui à cigarettes ;
- la figure 4 est une vue montrant le dispositif selon l'invention associé à un briquet ;
- la figure 5 est une vue montrant le dispositif selon l'invention associé à un porte-clés.

25

Afin de rendre plus concret l'objet de l'invention, on le décrit maintenant sous des formes non limitatives de réalisation illustrées aux figures du dessin.

30 Le dispositif tel qu'illustré aux figures 1 et 2, est constitué d'un corps (1) en métal bon conducteur thermique sans exclusion d'autres matériaux ayant des propriétés équivalentes. Axialement, le corps présente un orifice borgne (2) formant successivement à partir de son  
35 entrée un large chanfrein de guidage (2a), un alésage

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(2b) de diamètre (d1) sensiblement égal au diamètre d'une cigarette (C), suivi d'un alésage (2c) de diamètre (d2) inférieur au diamètre d'une cigarette. L'alésage (2b) a une profondeur (p1) approximativement égale à la profondeur (p2) de l'alésage (2c).

A titre indicatif, seulement le diamètre (d1) est égal à 8 mm, le diamètre (d2) à 7 mm, la hauteur (h1) à 5 mm, la hauteur (h2) à 6 mm, tandis que le chanfrein de guidage est à 30°.

D'une manière préférée, quoique non limitative, le corps (1) est réalisé sous la forme d'un cylindre avec au moins partiellement une surface rugueuse (crantages, micro-aspérités, striages ...) facilitant la préhension.

D'autre part, un traitement de surface tel que brunissage, chromage, dorure ou bien une peinture laquée, fluorescente, ou encore une sérigraphie publicitaire, peut être appliqué pour améliorer l'esthétique.

Le dispositif selon l'invention ainsi réalisé peut être facilement mis dans une poche, mais il peut également être placé par sa base plane sur un support quelconque ou présenter un agencement de fixation (aimant, autocollant...) pour être disposé dans un véhicule, ou bien encore comme illustré aux figures 3, 4 et 5, combiné avec un autre objet tel qu'un étui de cigarettes (3), un briquet (4), un porte-clés (5), un cendrier ...

30

Les avantages ressortent bien de la description, en particulier on note la rapidité d'extinction (4 secondes environ) par absorption de la chaleur dans le corps conducteur, la propreté du dispositif qui n'écrase pas les cendres du fait du blocage de la cigarette à mi-hauteur

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de l'orifice, cela sans odeur ni fumée, la facilité de manipulation et le faible encombrement du dispositif ainsi que l'aspect agréable et la possibilité de servir de support publicitaire.

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REVENDICATIONS

1/ Dispositif d'extinction rapide de cigarettes, caractérisé en ce qu'il est constitué d'un corps (1) en  
5 matériau de bonne conduction thermique agencé avec un orifice borgne (2) recevant et bloquant l'extrémité incandescente d'une cigarette (C) suivant une profondeur inférieure à celle de l'orifice, l'extinction rapide s'opérant par absorption de la chaleur à travers le maté-  
10 riau du corps.

2/ Dispositif selon la revendication 1, caractérisé en ce que l'orifice (2) de réception de l'extrémité incandescente de la cigarette présente successivement, à  
15 partir de son entrée, un large chanfrein (2a) de guidage, un alésage (2b) de diamètre (d1) sensiblement égal à celui de la cigarette et un alésage (2c) de diamètre (d2) inférieur à celui de la cigarette, afin d'assurer son arrêt en durée sans écrasement de la cendre.

20

3/ Dispositif selon la revendication 1, caractérisé en ce que le corps est réalisé en métal de bonne conduction thermique.

25 4/ Dispositif selon la revendication 1, caractérisé en ce qu'il présente extérieurement un traitement de surface.

5/ Dispositif selon la revendication 1, caractérisé  
20 en ce qu'il présente extérieurement une peinture.

6/ Dispositif selon la revendication 1, caractérisé en ce qu'il présente extérieurement une publicité.

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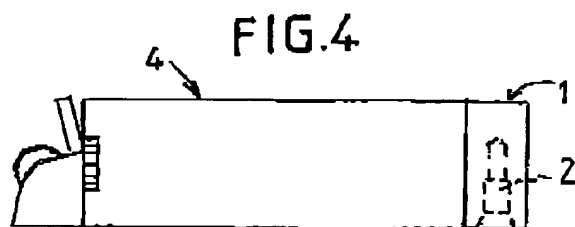
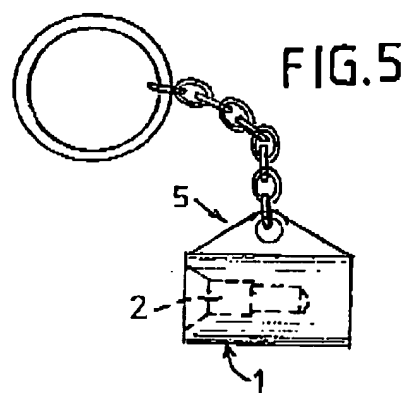
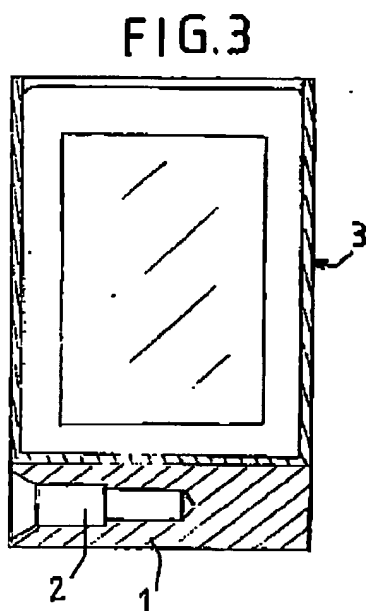
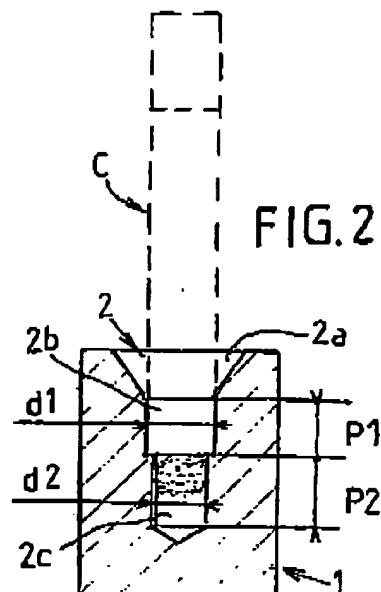
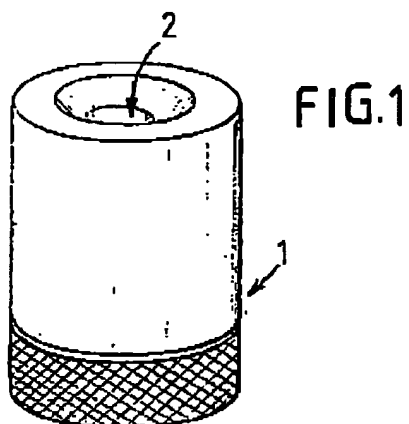
7/ Dispositif selon la revendication, caractérisé en ce qu'il présente extérieurement et au moins partiellement une surface rugueuse facilitant la préhension.

5 8/ Dispositif selon la revendication 1, caractérisé en ce qu'il est combiné avec un autre objet tel que cendrier, étui à cigarettes, briquet, porte-clés ...

9/ Dispositif selon la revendication 1, caractérisé en ce que sa surface de base plane est équipée pour assurer sa fixation sur un support quelconqué.

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## PATENT COOPERATION TREATY

JAN 10 2005

PC 0001

From the INTERNATIONAL SEARCHING AUTHORITY

PCT

NOTIFICATION OF TRANSMITTAL OF  
THE INTERNATIONAL SEARCH REPORT AND  
THE WRITTEN OPINION OF THE INTERNATIONAL  
SEARCHING AUTHORITY, OR THE DECLARATION

To:

FISH & RICHARDSON P.C.  
Attn. Troesch, Hans R.  
500 Arguello Street, Suite 500  
Redwood City, CA 94063-1526  
UNITED STATES OF AMERICA

RECEIVED

JAN 10 2005

FISH &amp; RICHARDSON

(PCT Rule 44.1)

Applicant's or agent's file reference 16217-002WO1	Date of mailing (day/month/year) 29/12/2004
International application No. PCT/US2004/028548	International filing date (day/month/year) 01/09/2004
Applicant COULTRANS, INC.	

1. ☒ The applicant is hereby notified that the international search report and the written opinion of the International Searching Authority have been established and are transmitted herewith.

## Filing of amendments and statement under Article 19:

The applicant is entitled, if he so wishes, to amend the claims of the International Application (see Rule 46):

**When?** The time limit for filing such amendments is normally 2 months from the date of transmittal of the International Search Report; however, for more details, see the notes on the accompanying sheet.

**Where?** Directly to the International Bureau of WIPO, 34 chemin des Colombettes  
1211 Geneva 20, Switzerland, Fascimile No.: (41-22) 740.14.35

For more detailed instructions, see the notes on the accompanying sheet.

2. ☐ The applicant is hereby notified that no International search report will be established and that the declaration under Article 17(2)(a) to that effect and the written opinion of the International Searching Authority are transmitted herewith.
3. ☐ With regard to the protest against payment of (an) additional fee(s) under Rule 40.2, the applicant is notified that:

- ☐ the protest together with the decision thereon has been transmitted to the International Bureau together with the applicant's request to forward the texts of both the protest and the decision thereon to the designated Offices.
- ☐ no decision has been made yet on the protest; the applicant will be notified as soon as a decision is made.

## 4. Reminders


Shortly after the expiration of 18 months from the priority date, the International application will be published by the International Bureau. If the applicant wishes to avoid or postpone publication, a notice of withdrawal of the international application, or of the priority claim, must reach the International Bureau as provided in Rules 90bis.1 and 90bis.3, respectively, before the completion of the technical preparations for international publication.

The applicant may submit comments on an informal basis on the written opinion of the International Searching Authority to the International Bureau. The International Bureau will send a copy of such comments to all designated Offices unless an international preliminary examination report has been or is to be established. These comments would also be made available to the public but not before the expiration of 30 months from the priority date.

Within 19 months from the priority date, but only in respect of some designated Offices, a demand for international preliminary examination must be filed if the applicant wishes to postpone the entry into the national phase until 30 months from the priority date (in some Offices even later); otherwise, the applicant must, within 20 months from the priority date, perform the prescribed acts for entry into the national phase before those designated Offices.

In respect of other designated Offices, the time limit of 30 months (or later) will apply even if no demand is filed within 19 months.

See the Annex to Form PCT/IB/301 and, for details about the applicable time limits, Office by Office, see the *PCT Applicant's Guide*, Volume II, National Chapters and the WIPO Internet site.

Name and mailing address of the International Searching Authority  European Patent Office, P.B. 5818 Patentlaan 2 NL-2280 HV Rijswijk Tel. (+31-70) 340-2040, Tx. 31 651 epo nl, Fax: (+31-70) 340-3016	Authorized officer  Christine Kiepe
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Form PCT/ISA/220 (January 2004)

(See notes on accompanying sheet)

## NOTES TO FORM PCT/ISA/220

These Notes are intended to give the basic instructions concerning the filing of amendments under article 19. The Notes are based on the requirements of the Patent Cooperation Treaty, the Regulations and the Administrative Instructions under that Treaty. In case of discrepancy between these Notes and those requirements, the latter are applicable. For more detailed information, see also the PCT Applicant's Guide, a publication of WIPO.

In these Notes, "Article", "Rule", and "Section" refer to the provisions of the PCT, the PCT Regulations and the PCT Administrative Instructions respectively.

### INSTRUCTIONS CONCERNING AMENDMENTS UNDER ARTICLE 19

The applicant has, after having received the international search report, one opportunity to amend the claims of the international application. It should however be emphasized that, since all parts of the international application (claims, description and drawings) may be amended during the international preliminary examination procedure, there is usually no need to file amendments of the claims under Article 19 except where, e.g. the applicant wants the letter to be published for the purposes of provisional protection or has another reason for amending the claims before international publication. Furthermore, it should be emphasized that provisional protection is available in some States only.

#### What parts of the international application may be amended?

Under Article 19, only the claims may be amended.

During the international phase, the claims may also be amended (or further amended) under Article 34 before the International Preliminary Examining Authority. The description and drawings may only be amended under Article 34 before the International Examining Authority.

Upon entry into the national phase, all parts of the international application may be amended under Article 28 or, where applicable, Article 41.

#### When?

Within 2 months from the date of transmittal of the international search report or 16 months from the priority date, whichever time limit expires later. It should be noted, however, that the amendments will be considered as having been received on time if they are received by the International Bureau after the expiration of the applicable time limit but before the completion of the technical preparations for international publication (Rule 46.1).

#### Where not to file the amendments?

The amendments may only be filed with the International Bureau and not with the receiving Office or the International Searching Authority (Rule 46.2).

Where a demand for international preliminary examination has been/is filed, see below.

#### How?

Either by cancelling one or more entire claims, by adding one or more new claims or by amending the text of one or more of the claims as filed.

A replacement sheet must be submitted for each sheet of the claims which, on account of an amendment or amendments, differs from the sheet originally filed.

All the claims appearing on a replacement sheet must be numbered in Arabic numerals. Where a claim is cancelled, no renumbering of the other claims is required. In all cases where claims are renumbered, they must be renumbered consecutively (Administrative Instructions, Section 205(b)).

The amendments must be made in the language in which the international application is to be published.

#### What documents must/may accompany the amendments?

**Letter (Section 205(b)):**

The amendments must be submitted with a letter.

The letter will not be published with the international application and the amended claims. It should not be confused with the "Statement under Article 19(1)" (see below, under "Statement under Article 19(1)").

The letter must be in English or French, at the choice of the applicant. However, if the language of the international application is English, the letter must be in English; if the language of the international application is French, the letter must be in French.

## NOTES TO FORM PCT/ISA/220 (continued)

The letter must indicate the differences between the claims as filed and the claims as amended. It must, in particular, indicate, in connection with each claim appearing in the international application (it being understood that identical indications concerning several claims may be grouped), whether

- (i) the claim is unchanged;
- (ii) the claim is cancelled;
- (iii) the claim is new;
- (iv) the claim replaces one or more claims as filed;
- (v) the claim is the result of the division of a claim as filed.

The following examples illustrate the manner in which amendments must be explained in the accompanying letter:

1. [Where originally there were 48 claims and after amendment of some claims there are 51]:  
"Claims 1 to 29, 31, 32, 34, 35, 37 to 48 replaced by amended claims bearing the same numbers; claims 30, 33 and 36 unchanged; new claims 49 to 51 added."
2. [Where originally there were 15 claims and after amendment of all claims there are 11]:  
"Claims 1 to 15 replaced by amended claims 1 to 11."
3. [Where originally there were 14 claims and the amendments consist in cancelling some claims and in adding new claims]:  
"Claims 1 to 6 and 14 unchanged; claims 7 to 13 cancelled; new claims 15, 16 and 17 added," or  
"Claims 7 to 13 cancelled; new claims 15, 16 and 17 added; all other claims unchanged."
4. [Where various kinds of amendments are made]:  
"Claims 1-10 unchanged; claims 11 to 13, 18 and 19 cancelled; claims 14, 15 and 16 replaced by amended claim 14; claim 17 subdivided into amended claims 15, 16 and 17; new claims 20 and 21 added."

**"Statement under article 19(1)" (Rule 46.4)**

The amendments may be accompanied by a statement explaining the amendments and indicating any impact that such amendments might have on the description and the drawings (which cannot be amended under Article 19(1)).

The statement will be published with the international application and the amended claims.

It must be in the language in which the international application is to be published.

It must be brief, not exceeding 500 words if in English or if translated into English.

It should not be confused with and does not replace the letter indicating the differences between the claims as filed and as amended. It must be filed on a separate sheet and must be identified as such by a heading, preferably by using the words "Statement under Article 19(1)."

It may not contain any disparaging comments on the international search report or the relevance of citations contained in that report. Reference to citations, relevant to a given claim, contained in the international search report may be made only in connection with an amendment of that claim.

**Consequence if a demand for international preliminary examination has already been filed**

If, at the time of filing any amendments under Article 19, a demand for international preliminary examination has already been submitted, the applicant must preferably, at the same time of filing the amendments with the International Bureau, also file a copy of such amendments with the International Preliminary Examining Authority (see Rule 62.2(a), first sentence).

**Consequence with regard to translation of the international application for entry into the national phase**

The applicant's attention is drawn to the fact that, where upon entry into the national phase, a translation of the claims as amended under Article 19 may have to be furnished to the designated/elected Offices, instead of, or in addition to, the translation of the claims as filed.

For further details on the requirements of each designated/elected Office, see Volume II of the PCT Applicant's Guide.

## PATENT COOPERATION TREATY

## PCT

## INTERNATIONAL SEARCH REPORT

(PCT Article 18 and Rules 43 and 44)

Applicant's or agent's file reference <b>16217-002WO1</b>	<b>FOR FURTHER ACTION</b> see Form PCT/ISA/220 as well as, where applicable, Item 5 below.	
International application No. <b>PCT/US2004/028548</b>	International filing date (day/month/year) <b>01/09/2004</b>	(Earliest) Priority Date (day/month/year) <b>05/09/2003</b>
Applicant <b>COULTRANS, INC.</b>		

This International Search Report has been prepared by this International Searching Authority and is transmitted to the applicant according to Article 18. A copy is being transmitted to the International Bureau.

This International Search Report consists of a total of 5 sheets.

☒ It is also accompanied by a copy of each prior art document cited in this report.

## 1. Basis of the report

- a. With regard to the language, the international search was carried out on the basis of the international application in the language in which it was filed, unless otherwise indicated under this item.

☐ The international search was carried out on the basis of a translation of the international application furnished to this Authority (Rule 23.1(b)).

- b. ☐ With regard to any nucleotide and/or amino acid sequence disclosed in the international application, see Box No. I.

2. ☐ Certain claims were found unsearchable (See Box II).

3. ☐ Unity of invention is lacking (see Box III).

4. With regard to the title,

☒ the text is approved as submitted by the applicant.

☐ the text has been established by this Authority to read as follows:

5. With regard to the abstract,

☐ the text is approved as submitted by the applicant.

☒ the text has been established, according to Rule 38.2(b), by this Authority as it appears in Box No. IV. The applicant may, within one month from the date of mailing of this international search report, submit comments to this Authority.

6. With regards to the drawings,

- a. the figure of the drawings to be published with the abstract is Figure No. 1a

☒ as suggested by the applicant.

☐ as selected by this Authority, because the applicant failed to suggest a figure.

☐ as selected by this Authority, because this figure better characterizes the invention.

- b. ☐ none of the figures is to be published with the abstract.

Form PCT/ISA/210 (first sheet) (January 2004)

## INTERNATIONAL SEARCH REPORT

International application No.

PCT/US2004/028548

## Box No. IV Text of the abstract (Continuation of item 5 of the first sheet)

An apparatus for extinguishing and containing a cigarette. The apparatus includes a container (110) and a clip (115). The container has an open end (120), a hollow interior having a substantially constant interior diameter, and a closed end (125). The open end is configured to receive a cigarette (130), the interior is configured to contain a cigarette (130) and the container (110) is configured to extinguish a cigarette (130). The clip (115) is connected to the container (110), and includes a portion grasping the exterior of the cylindrical container, and two resilient arms (145, 150) configured to grasp a cigarette lighter (155). A first arm (145) is bowed toward a second arm (150), and the second arm (150) is bowed toward the first arm (145).

Form PCT/ISA/210 (continuation of first sheet (3)) (January 2004)

## PATENT COOPERATION TREATY

From the  
INTERNATIONAL SEARCHING AUTHORITY

To:

see form PCT/ISA/220

PCT

WRITTEN OPINION OF THE  
INTERNATIONAL SEARCHING AUTHORITY  
(PCT Rule 43bis.1)Date of mailing  
(day/month/year) see form PCT/ISA/210 (second sheet)Applicant's or agent's file reference  
see form PCT/ISA/220FOR FURTHER ACTION  
See paragraph 2 belowInternational application No.  
PCT/US2004/028548International filing date (day/month/year)  
01.09.2004Priority date (day/month/year)  
05.09.2003International Patent Classification (IPC) or both national classification and IPC  
A24F13/18Applicant  
COULTRANS, INC.

## 1. This opinion contains indications relating to the following items:

- ☒ Box No. I Basis of the opinion
- ☒ Box No. II Priority
- ☐ Box No. III Non-establishment of opinion with regard to novelty, inventive step and industrial applicability
- ☐ Box No. IV Lack of unity of invention
- ☒ Box No. V Reasoned statement under Rule 43bis.1(a)(i) with regard to novelty, inventive step or industrial applicability; citations and explanations supporting such statement
- ☐ Box No. VI Certain documents cited
- ☐ Box No. VII Certain defects in the international application
- ☐ Box No. VIII Certain observations on the international application

## 2. FURTHER ACTION

If a demand for international preliminary examination is made, this opinion will usually be considered to be a written opinion of the International Preliminary Examining Authority ("IPEA"). However, this does not apply where the applicant chooses an Authority other than this one to be the IPEA and the chosen IPEA has notified the International Bureau under Rule 66.1 b/s(b) that written opinions of this International Searching Authority will not be so considered.

If this opinion is, as provided above, considered to be a written opinion of the IPEA, the applicant is invited to submit to the IPEA a written reply together, where appropriate, with amendments, before the expiration of three months from the date of mailing of Form PCT/ISA/220 or before the expiration of 22 months from the priority date, whichever expires later.

For further options, see Form PCT/ISA/220.

## 3. For further details, see notes to Form PCT/ISA/220.

Name and mailing address of the ISA:



European Patent Office  
D-80298 Munich  
Tel. +49 89 2399 - 0 Tx: 523656 epmu d  
Fax: +49 89 2399 - 4465

Authorized Officer

MARZANO MONTEROSSO

Telephone No. +49 89 2399-2902



Form (PCT/ISA/237) (Cover Sheet) (January 2004)

**WRITTEN OPINION OF THE  
INTERNATIONAL SEARCHING AUTHORITY**International application No.  
PCT/US2004/028548**Box No. I Basis of the opinion**

1. With regard to the **language**, this opinion has been established on the basis of the international application in the language in which it was filed, unless otherwise indicated under this item.
  - ☐ This opinion has been established on the basis of a translation from the original language into the following language , which is the language of a translation furnished for the purposes of international search (under Rules 12.3 and 23.1(b)).
2. With regard to any **nucleotide and/or amino acid sequence** disclosed in the international application and necessary to the claimed invention, this opinion has been established on the basis of:
  - a. type of material:
    - ☐ a sequence listing
    - ☐ table(s) related to the sequence listing
  - b. format of material:
    - ☐ in written format
    - ☐ in computer readable form
  - c. time of filing/furnishing:
    - ☐ contained in the international application as filed.
    - ☐ filed together with the international application in computer readable form.
    - ☐ furnished subsequently to this Authority for the purposes of search.
3. ☐ In addition, in the case that more than one version or copy of a sequence listing and/or table relating thereto has been filed or furnished, the required statements that the information in the subsequent or additional copies is identical to that in the application as filed or does not go beyond the application as filed, as appropriate, were furnished.
4. Additional comments:

**WRITTEN OPINION OF THE  
INTERNATIONAL SEARCHING AUTHORITY**

 International application No.  
PCT/US2004/028548

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**Box No. II Priority**


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1. ☒ The following document has not been furnished:

☒ copy of the earlier application whose priority has been claimed (Rule 43*bis*.1 and 66.7(a)).

☐ translation of the earlier application whose priority has been claimed (Rule 43*bis*.1 and 66.7(b)).

Consequently it has not been possible to consider the validity of the priority claim. This opinion has nevertheless been established on the assumption that the relevant date is the claimed priority date.

2. ☐ This opinion has been established as if no priority had been claimed due to the fact that the priority claim has been found invalid (Rules 43*bis*.1 and 64.1). Thus for the purposes of this opinion, the international filing date indicated above is considered to be the relevant date.
3. ☐ It has not been possible to consider the validity of the priority claim because a copy of the priority document was not available to the ISA at the time that the search was conducted (Rule 17.1). This opinion has nevertheless been established on the assumption that the relevant date is the claimed priority date.
4. Additional observations, if necessary:

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**Box No. V Reasoned statement under Rule 43*bis*.1(a)(i) with regard to novelty, inventive step or industrial applicability; citations and explanations supporting such statement**


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1. Statement

Novelty (N)	Yes: Claims	1-12
	No: Claims	
Inventive step (IS)	Yes: Claims	
	No: Claims	1-12
Industrial applicability (IA)	Yes: Claims	1-12
	No: Claims	

2. Citations and explanations  
see separate sheet



**WRITTEN OPINION OF THE  
INTERNATIONAL SEARCHING  
AUTHORITY (SEPARATE SHEET)**

International application No.

PCT/US2004/028548

**Re Item V****Reasoned statement with regard to novelty, inventive step or industrial applicability; citations and explanations supporting such statement**

1. Reference is made to the following documents:

D1: US-A-5 564 443 (CARDENAS LUIS P) 15 October 1996 (1996-10-15)

D2: PATENT ABSTRACTS OF JAPAN vol. 1997, no. 06, 30 June 1997 (1997-06-30) & JP 9 047274 A (RIMOO KK), 18 February 1997 (1997-02-18)

D3: US-A-5 931 659 (WU CHIN-HSIUNG) 3 August 1999 (1999-08-03)

D4: US-A-4 560 344 (KIETAIBL JOSEF) 24 December 1985 (1985-12-24)

2. The present application does not meet the criteria of Article 33(1) PCT, because the subject-matter of claim 1 does not involve an inventive step in the sense of Article 33(3) PCT.
- 2.1 The document D1 is regarded as being the closest prior art to the subject-matter of claim 1, and discloses (the references in parentheses applying to this document): an apparatus for extinguishing and containing a cigarette, the apparatus comprising a container (14) configured to receive and extinguish a cigarette, first and second resilient arms (18) configured to grasp a lighter (see col. 2, l. 23-39) and means for joining the resilient arms to the exterior of the container.
- 2.2 The subject-matter of claim 1 therefore differs from this known apparatus in that: a bottle opener is connected to the exterior of the container.
- 2.3 The problem to be solved by the present invention may therefore be regarded as providing to the smoker additional functions that are often required at the same time as smoking a cigarette.
- 2.4 The solution proposed in claim 1 of the present application cannot be considered as involving an inventive step (Article 33(3) PCT) for the following reasons. Providing a bottle opener in connection with smoking accessories is a feature that is already used in several applications and is therefore considered as customary practice of the person skilled in the art: documents D3-D4 are only few examples of such combination. The inclusion of a bottle opener in an apparatus according to D1 does therefore not involve an inventive step.
- 2.5 It is furthermore pointed out that the subject matter of claim 1 cannot be considered inventive either when document D2 (see fig. 7) is considered closest prior art and combined with the disclosure of D3 or D4.
3. Dependent claims 2-12 do not contain any features which, in combination with the

**WRITTEN OPINION OF THE  
INTERNATIONAL SEARCHING  
AUTHORITY (SEPARATE SHEET)**

International application No.

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features of any claim to which they refer, meet the requirements of the PCT in respect of inventive step, see documents D1 to D4 and the corresponding passages cited in the search report.

International Application No  
PCT/US2004/028548

C.(Continuation) DOCUMENTS CONSIDERED TO BE RELEVANT		
Category *	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
Y	US 6 142 769 A (WALKER TREVOR LEE) 7 November 2000 (2000-11-07) the whole document	1,5-8, 10-12
A	US 6 463 936 B1 (HICKS DOUGLAS A) 15 October 2002 (2002-10-15) the whole document	1-12
A	FR 2 676 892 A (BELIN LAURENT ; PAMARD FREDERIQUE (FR)) 4 December 1992 (1992-12-04) the whole document	1
A	FR 2 386 992 A (VEYRET EMMANUEL) 10 November 1978 (1978-11-10) the whole document	1
A	US 4 478 230 A (MAZELIE YVES) 23 October 1984 (1984-10-23) the whole document	1

International Application No  
PCT/US2004/028548A. CLASSIFICATION OF SUBJECT MATTER  
IPC 7 A24F13/18

According to International Patent Classification (IPC) or to both national classification and IPC

## B. FIELDS SEARCHED

Minimum documentation searched (classification system) followed by classification symbols)  
IPC 7 A24F F23Q

Documentation searched other than minimum documentation to the extent that such documents are included in the fields searched

Electronic data base consulted during the international search (name of data base and, where practical, search terms used)

EPO-Internal, PAJ, WPI Data

## C. DOCUMENTS CONSIDERED TO BE RELEVANT

Category *	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
Y	US 5 564 443 A (CARDENAS LUIS P) 15 October 1996 (1996-10-15) the whole document	1,5-8, 10-12
Y	PATENT ABSTRACTS OF JAPAN vol. 1997, no. 06, 30 June 1997 (1997-06-30) & JP 9 047274 A (RIMOO KK), 18 February 1997 (1997-02-18) abstract	1,6-8
Y	US 5 931 659 A (WU CHIN-HSIUNG) 3 August 1999 (1999-08-03) figure 5	1,5-8, 10-12
Y	US 4 560 344 A (KIETAIBL JOSEF) 24 December 1985 (1985-12-24) the whole document	1,5-8, 10-12

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☒ Further documents are listed in the continuation of box C.☒ Patent family members are listed in annex.

## \* Special categories of cited documents:

- \*A\* document defining the general state of the art which is not considered to be of particular relevance
- \*E\* earlier document but published on or after the international filing date
- \*L\* document which may throw doubts on priority claim(s) or which is cited to establish the publication date of another citation or other special reason (as specified)
- \*O\* document referring to an oral disclosure, use, exhibition or other means
- \*P\* document published prior to the international filing date but later than the priority date claimed

- \*T\* later document published after the international filing date or priority date and not in conflict with the application but cited to understand the principles or theory underlying the invention
- \*X\* document of particular relevance; the claimed invention cannot be considered novel or cannot be considered to involve an inventive step when the document is taken alone
- \*Y\* document of particular relevance; the claimed invention cannot be considered to involve an inventive step when the document is combined with one or more other such documents, such combination being obvious to a person skilled in the art
- \*G\* document member of the same patent family

Date of the actual completion of the international search

16 December 2004

Date of mailing of the international search report

29/12/2004

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page 1 of 2

## INTERNATIONAL SEARCH REPORT

Information on patent family members

International Application No

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Patent document cited in search report		Publication date	Patent family member(s)	Publication date
US 5564443	A	15-10-1996	CA 2060804 A1 AU 3445693 A WO 9315620 A2 GB 2281120 A ,B	07-08-1993 03-09-1993 19-08-1993 22-02-1995
JP 9047274	A	18-02-1997	NONE	
US 5931659	A	03-08-1999	NONE	
US 4560344	A	24-12-1985	NONE	
US 6142769	A	07-11-2000	NONE	
US 6463936	B1	15-10-2002	NONE	
FR 2676892	A	04-12-1992	FR 2676892 A1	04-12-1992
FR 2386992	A	10-11-1978	FR 2386992 A1	10-11-1978
US 4478230	A	23-10-1984	FR 2359377 A1 FR 2388209 A2 BE 856109 A1 BR 7704767 A CH 615009 A5 DE 2729515 A1 DK 330277 A ,B, DK 498078 A ES 460905 A1 GB 1590405 A IE 45523 B1 IT 1079877 B JP 53014076 A LU 77694 A1 NL 7708098 A SE 7708412 A	17-02-1978 17-11-1978 17-10-1977 02-05-1978 28-12-1979 26-01-1978 23-01-1978 09-11-1978 16-11-1978 03-06-1981 22-09-1982 13-05-1985 08-02-1978 04-10-1977 24-01-1978 23-01-1978

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